APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,812	01/12/2004	Hao Xue	291010-00475	3131

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EXAMINER
RAMAKRISHNAIAH, MELUR

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/755,812	XUE ET AL.
	Examiner	Art Unit	
	Melur Ramakrishnaiah	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*26 June 2006*</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21,23-26 and 29-44* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21,23-26 and 29-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>*8-26-04, 1-27-05*</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on has

been entered.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

3.   Claims 1-10, 11-19, 20, 29-36, 37-44 are rejected under 35 U.S.C. 112, first

paragraph, as failing to comply with the enablement requirement. The claim(s) contains

subject matter which was not described in the specification in such a way as to enable

one skilled in the art to which it pertains, or with which it is most nearly connected, to

make and/or use the invention. For example amended independent claim 1 recites

among other things the following: determining step overriding network preferences in

said preferred roaming list. Similar limitations are found in other amended independent

claims. Regarding support for this, although applicant points to page 2, lines 5-7, page

7, line 16, to page 11, line 26, as well as page 8. There is nothing in these pages,

which support the claim limitation such as: determining step overriding network

preferences in said preferred roaming list. The above pages contain tables listing

preferred roaming list etc, and there is no mention of step of overriding network

preferences in said preferred roaming list.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-10, 11-19, 20, 21-26, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Bridges et al. (WO 99/45723, hereinafter Bridges) in view of Guilford

et al. (US 2002/0087674 A1, hereinafter Guilford).

Regarding claim 1, Bridges discloses a method of providing mobile data devices

in a wireless system with information about preferred networks to connect to, the mobile

data device having a preferred roaming list with a list of networks, the method

comprising: including information in the preferred roaming list about data capabilities of

each network, and determining at the mobile device (page 7, line 29 – page 8, line 9)

preferred networks based on the information within the preferred roaming list a

geographic area and the data capabilities of the network (page 4, line 24 – page 8, line

24; page 11, line 13 – line 16; page 16, line 19 – page 20, line 21; figs 2A, 2B, 2C, 4).

Regarding claim 11, Bridges discloses a method of providing mobile data devices

in a wireless system with information about preferred networks to connect to, the mobile

data device having a preferred roaming list with a list of networks, the method

comprising: including information in the preferred roaming list about whether each

network in the of network supports required service capabilities, and determining at the

mobile device (page 7, line 29 – page 8, line 9) preferred networks based on the

information within the preferred roaming list including a geographic area whether the

network supports required service capabilities, whereby within the geographic area, the

mobile device prefers those of the networks which support required service capabilities

over the which do not support the required service capabilities (page 4, line 24 – page

8, line 24; page 11, line 13 – line 16; page 16, line 19 – page 20, line 21; figs 2A, 2B,

2C, 4).

Regarding claim 20, Bridges discloses a method of providing mobile data devices

in a wireless system with information about preferred networks to connect to, the mobile

data device having a preferred roaming list with a list of networks, the method

comprising: including preferred roaming list information about whether each of the

networks in the networks supports required service capabilities, determining at the

mobile station preferred networks based on information within the preferred roaming list

including a geographic area (page 7, line 29 – page 8, line 9) including preferred

roaming list information about whether each of the network in the list supports roaming

(page 4, line 24 – page 8, line 24; page 11, line 13 – line 16; page 16, line 19 – page 20,

line 21; figs 2A, 2B, 2C, 4).

Regarding claim 21, Bridges discloses a system for providing a mobile data

device in a wireless system with information about preferred networks to connect to

from a list of networks, the system comprising: the mobile data device (68, fig. 2A), the

mobile data device being capable of connecting to some or all of networks within the list

of networks, and preferred roaming list within the mobile data device, the preferred

roaming list including information for each network within the list of networks as shown

in tables 1-4, geographic information for each network within the list of networks,

information about each network within the list of networks, indicating whether network

supports data capability whereby mobile data device chooses a preferred network

based on the geographic information and those of the networks within the list of

networks that support data capability (page 4, line 24 – page 8, line 24; page 11, line 13

– line 16; page 16, line 19 – page 20, line 21; figs 2A, 2B, 2C, 4).

Bridges differs from claims 1,2-4, 5, 6, 10, 11-15, 19, 20, 21, 23-26 in that he

does not explicitly teach the following: each of the networks in the list of networks

support: third generation data capabilities and determining step prefers those of the

networks that support third generation data capabilities over those which do not support

third generation data capabilities, data roaming and determining step prefers those of

the networks that support data roaming over those of the networks which do not support

data roaming, mobile IP service and the determining step prefers those of the networks

that support mobile IP services over those of the networks which do not support mobile

IP service, always-on feature and the determining step prefers those of the networks

that support the always-on feature to those of the networks which do not support the

always on feature, information in the preferred roaming list about service capability of

the mobile data device, and restricting service requests from the mobile data device

based on the data service capability of the device, capability information includes

whether device supports a browser, and determining step overriding network preferences in the preferred roaming list.

However, Guilford discloses intelligent network selection based on quality of service and applications over different wireless networks which teaches the following: each of the networks in the list of networks support: third generation data capabilities and determining step prefers those of the networks that support third generation data capabilities (reads on video service) over those which do not support third generation data capabilities (paragraph: 0059), data roaming and determining step prefers those of the networks that support data roaming over those of the networks which do not support data roaming, mobile IP service and the determining step prefers those of the networks that support mobile IP services (paragraph: 0006) over those of the networks which do not support mobile IP service, always-on feature and the determining step prefers those of the networks that support the always-on feature to those of the networks which do not support the always on feature, information in the preferred roaming list about service capability of the mobile data device, and restricting service requests from the mobile data device based on the data service capability of the device, capability information includes whether device supports a browser, and determining step overriding network preferences (note this reads on algorithm operating in the mobile device selecting required network to meet its data needs, see paragraphs: 0022-0023; 0059) in the preferred roaming list (paragraphs: 7-16; 21-23; 27-28; 45; 51-62; 66-67; 72-73; 79; figs. 2, 4, 7a).

Thus it would have been obvious to one of ordinary skill in the art at the time

invention was made to modify Bridges' system to provide for the following: each of the

networks in the list of networks support: third generation data capabilities and

determining step prefers those of the networks that support third generation data

capabilities over those which do not support third generation data capabilities, data

roaming and determining step prefers those of the networks that support data roaming

over those of the networks which do not support data roaming, mobile IP service and

the determining step prefers those of the networks that support mobile IP services over

those of the networks which do not support mobile IP service, always-on feature and the

determining step prefers those of the networks that support the always-on feature to

those of the networks which do not support the always on feature, information in the

preferred roaming list about service capability of the mobile data device, and restricting

service requests from the mobile data device based on the data service capability of the

device, capability information includes whether device supports a browser as this

arrangement would provide the user to select required service based on his needs as

taught by Guilford, thus providing means to meet user needs, determining step

overriding network preferences in the preferred roaming list as this arrangement would

facilitate the mobile device to select the required network to meet its data reception

needs as taught by Guilford (paragraph: 0059)

Regarding claims 7-9, 16-18, Bridges teaches the following: service capability

information includes whether the device supports: data service, voice service, supports

SMS service (Table 2).

6.   Claims 29-33, 35, 37-41, 43-44 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Islam in view of Guilford.

Regarding claim 29, Islam discloses a method of a mobile data device to

determine a network to acquire based on a plurality of system preference criteria stored

in the preferred list on the mobile device, the method comprising the steps of: waiting

until a new network needs to be acquired, choosing the network to acquire at the mobile

data device based on the plurality of system preferences stored in the mobile device,

and starting a search for the new network (paragraphs: 0004, 0006, 0012; 0060-0064;

figs. 3-4).

Regarding claim 37, Islam discloses a mobile data device for acquiring one of

plurality of networks based on plurality of system preference criteria stored in a

preferred list on the mobile data device, characterized by means for: waiting until new

network needs to be acquired, choosing the network to acquire at the mobile data

device (102, fig. 1) based on the plurality of preference criteria stored on the mobile

device, and starting a search for the new network (paragraphs: 0004, 0006, 0012; 0060-

0064; figs. 3-4).

Islam differs from claims 29 and 37 in that he does not specifically teach storing

preferred roaming list in the mobile device and choosing step overriding network

preferences in the preferred roaming list.

However, Guilford teaches the following: storing preferred roaming list in the

mobile device and choosing step overriding network preferences in the preferred

roaming list (paragraphs: 0022-0023; 0059).

Thus it would have been obvious to one of ordinary skill in the art at the time

invention was made to modify Islam's system to provide for the following: storing

preferred roaming list in the mobile device and choosing step overriding network

preferences in the preferred roaming list as this arrangement would facilitate selecting

required network in a roaming situation as taught by Guilford, thus facilitating roaming

for mobile device with ability to select the required data network to meet its data

reception nedds.

Regarding claims 30-33, 35, 38-41, 43-44, Islam further teaches the following:

plurality of system preference criteria includes at least geographic information and data

capability information, system preference criteria further includes information about

whether each of the available network supports: data roaming for mobile data device

(102, fig. 1), mobile IP, an always on device (note mobile device 102 is 3G capable and

also prefers 3G network which implies it supports always on, paragraph: 0030), mobile

stores a list of service features that mobile devices supports and plurality of system

preference criteria that includes a list of services the network supports (paragraph:

0030, 0019, 0042-0043; 0053, 0061-0064), mobile device (102, fig. 1) includes means

(120; fig. 1) for storing a list of service features the mobile data device supports and

plurality of system preference criteria further includes a list of services the network

supports, mobile data deuce includes means for storing the plurality of system

preferences criteria in a table (see table 1) with available networks (paragraphs: 0060-

0064).

7.   Claims 34 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Islam in view of Guilford as applied to claims 34 and 38 above, and further in view

of Almgren (WO 2004/066663A1, filed 12-3-2003).

The combination differs from claims 34 and 42 in that mobile device gives

preference to various ones of the pluralities of system preferences criteria to create a

ranking of available networks.

However, Almgren discloses a roaming method which teaches the following:

mobile device gives preference to various ones of the pluralities of system preferences

criteria to create a ranking of available networks (reads on creating priority list, see

abstract).

Thus it would have been obvious to one of ordinary skill in the art at the time

invention was made to modify the combination to provide for the following: mobile

device gives preference to various ones of the pluralities of system preferences criteria

to create a ranking of available networks as this arrangement would facilitate connecting

to the network based on the priority/ranking of networks as taught by Almgren, thus

facilitating the user to connect to the best available network.

8.   Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Islam in

view of Guilford as applied to claim 29 above, and further in view of Russell (US

2004/0249915).

The combination differs from claim 36 in that he does not teach the following:

choosing step can find no networks are available.

However, Russell teaches the following: choosing step can find no networks are available (fig. 8, paragraph: 0096).

Thus it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: choosing step can find no networks are available as this arrangement would facilitates the user to learn the no network is available for connection as taught by Russell, so that user is not kept in darkness as to availability of the network.

Response to Arguments

9.   Applicant's arguments filed on 6-26-2006 have been fully considered but they are not persuasive.

Rejection of claims 1-10, 11-19, 20, 21-26 under 35 U.S.C 103(a) as being obvious over Bridges et al. (WO 99/45723, hereinafter Bridges) in view of Guilford et al. (US 2002/0087674 A1, hereinafter Guilford): regarding rejection of claims 1, 11, and 20, Applicant argues that "Claims 1, 11, and 20 have been amended to recite that the decision making is done at the mobile station based on the preferred roaming list. This is contrary to Bridges which describes that the step of determining which preferred network to use is done by a database at the network and subsequently downloaded to the mobile device". Regarding this, Bridges not only teaches this as admitted by the applicant above, he also teaches the following: programming of the mobile station unit and entry of preferred wireless carrier identities may also be performed manually by using the keypad of the mobile station unit (page 8 lines 7-9). He also further teaches mobile station with selector that selects a preferred wireless carrier from the list stored

in the memory when the mobile station is roaming and enters one of the market areas of the plurality of market areas (page 7, line 29 – page 8, line 3). Applicant further argues that "Moreover, claims 1, 11, and 20 have been amended that the mobile device ca override the network preferences in a preferred roaming list. Bridges, however, does not describe a mobile device that has this capability". Regarding this, Guilford teaches the following: determining step overriding network preferences (note this reads on algorithm operating in the mobile device selecting required network to meet its data needs, see paragraphs: 0022-0023; 0059) in the preferred roaming list. Therefore, combination of Bridges and Guilford still reads on applicant's amended claims as set forth in the office action above.

Regarding Guilford, Applicant referrers to Paragraph [0059] and concludes that intelligence for this network is on the network, and not on the mobile device. Contrary to applicants interpretation of Paragraph [0059] of Guilford, Guilford clearly teaches that an algorithm operating on the wireless device (12) references the table and instructs the wireless device 12 to register with the 3G wireless network according to the data in the table. In this manner, the wireless device may register with the appropriate network that can handle high speed data request (paragraph: 0059). This clearly shows that decision making is happening at the mobile device based on table stored in the mobile device.
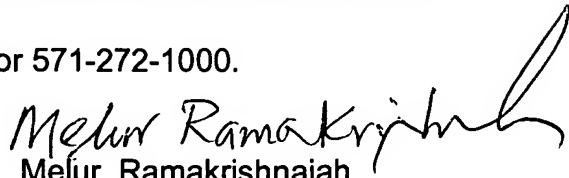
Applicants arguments regarding rejection of claims 29-44 are moot in view of new grounds of rejection under 35 U.S.C 103.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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